UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

52989 7590 1006/2008 DICKINSON WRIGHT PLLC 1901 L STREET NW SUITE 800 WASHINGTON DC 20036 EXAMINER
YOUNG, NATASHA E
ART UNIT PAPER NUMBER
1797

DATE MAILED: 10/06/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/581,967	06/07/2006	Yuji Mukai	L7002.06103	7261			
TITLE OF INVENTION: HYDROGEN GENERATING APPARATUS							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further a indicated unless correcte maintenance fee notificat	form should be used for correspondence includir d below or directed oth ions	or transi ig the Pa ierwise i	nitting the ISSU stent, advance or n Block 1, by (a	TE FEE and PUBLICA' ders and notification of i) specifying a new corr	FION FEE (if requestion of the	nired). I will be ;; and/o	Blocks 1 through 5 st mailed to the current r (b) indicating a sepa	hould be completed when correspondence address a trate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				No Fe pa	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
1901 L STREET SUITE 800		/2008		11	Ce	rtificat	e of Mailing or Trans	mission g deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
WASHINGTON	, DC 20036							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	R	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/581,967	06/07/2006			Yuji Mukai			L7002.06103	7261
TITLE OF INVENTION:					_			
APPLN, TYPE	SMALL ENTITY	ISSU	E FEE DUE	PUBLICATION FEE DUE		E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	01/06/2009
EXAM	NER	А	RT UNIT	CLASS-SUBCLASS				
YOUNG, NA	ATASHA E		1797	422-191000				
"Fee Address" indi PTO/SB/47; Rev 03-0: Number is required.	ondence address (or Cha /122) attached. cation (or "Fee Address 2 or more recent) attach	nge of C 'Indicati ed. Use o	orrespondence on form of a Customer	For printing on the     (1) the names of up or agents OR, alterna     (2) the name of a single registered attorney or 2 registered patent at listed, no name will be considered.	to 3 registered pate tively, gle firm (having as agent) and the nan torneys or agents. If e printed.	nt attor a memb nes of u	per a 2	
3. ASSIGNEE NAME AT PLEASE NOTE: Unla recordation as set forth (A) NAME OF ASSIC	ess an assignee is ident nin 37 CFR 3.11. Comp	ified belo letion of	ow, no assignee this form is NO	data will appear on the I'a substitute for filing a (B) RESIDENCE: (CIT	patent. If an assign n assignment. 'Y and STATE OR	COUN	TRY)	ocument has been filed for
4a. The following fee(s) a  Issue Fee Publication Fee (N Advance Order - #	o small entity discount p	ermitted	41	o. Payment of Fee(s): (Ph  A check is enclosed.  Payment by credit c  The Director is herel overpayment, to Dep	ease first reapply a ard. Form PTO-203	ny pre 8 is att: rge the	viously paid issue fee ached.	shown above)
	SMALL ENTITY state	s. See 37		b. Applicant is no lo				
interest as shown by the r	ecords of the United Sta	tes Paten	t and Trademark	Office.	un uppricalit, a reg	,tou	amorate, or agent, or ti	e assignee or other party ir
Authorized Signature					Date			
Typed or printed name					Registration 1			
This collection of informa an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but riginia 22313-1450. DC (3-1450.	FR 1.31 U.S.C. 1 USPTO den, sho NOT SI	I. The informatic 22 and 37 CFR Time will vary uld be sent to the END FEES OR	on is required to obtain or 1.14. This collection is e depending upon the ind e Chief Information Offi COMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any c cer, U.S. Patent and IO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tir mark Office, U.S. Dep D TO: Commissioner	by the USPTO to process g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/581,967	06/07/2006	Yuji Mukai	L7002.06103	7261		
52989	7590 10/06/2008		EXAMINER			
DICKINSON V	VRIGHT PLLC	YOUNG, NATASHA E				
1901 L STREET	NW		ART UNIT	PAPER NUMBER		
SUITE 800 WASHINGTON	DC 20036	1797 DATE MAII ED: 10/06/200	8			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 71 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 71 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/581,967 MUKAI ET AL. Examiner Art Unit NATASHA YOUNG 1797

— The MAILING DATE of this communication appears on the cover sheet with the correspondence addressAll claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to Remarks filed on June 19, 2008.
- The allowed claim(s) is/are 1-13.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. \( \subseteq \text{ Certified copies of the priority documents have been received.} \)
    - Certified copies of the priority documents have been received in Application No.
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date \_\_\_\_\_\_

  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

Application/Control Number: 10/581,967 Page 2

Art Unit: 1797

## DETAILED ACTION

# Allowable Subject Matter

Claims 1-13 are allowed.

The prior art references do not disclose or suggest the teachings of a hydrogen generator comprising first and second passages configured to branch off, at their leading ends, from the mixed gas passage and join each other at their trailing ends; first turning means formed in the first passage to turn the mixed gas flowing in the first passage in a first direction; and second turning means formed in the second passage to turn the mixed gas flowing in the second passage in a second direction opposite to the first direction.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Miura et al (US 2004/0144029 A1) and Sanger et al (US 6,793,698 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATASHA YOUNG whose telephone number is 571-270-3163. The examiner can normally be reached on Mon-Thurs 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/581,967 Page 3

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. Y./ Examiner, Art Unit 1797

/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1797